

SEQUENCE LISTING

<110> Donoho, Gregory
 Scoville, John
 Turner, C. Alexander Jr.
 Friedrich, Glenn
 Zambrowicz, Brian
 Sands, Arthur T.

<120> NOVEL HUMAN THROMBOSPONDIN REPEAT PROTEINS AND
 POLYNUCLEOTIDES ENCODING THE SAME

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Arg	Ile	Val	Phe	Leu	Gln	Gly	His	Lys	Lys	Tyr	Ile	Leu	Gln	Ala	Thr
				1395			1400					1405			
Asn	Thr	Arg	Thr	Asn	Ser	Asn	Asp	Pro	Thr	Gly	Glu	Pro	Pro	Pro	Gln
				1410			1415				1420				
Glu	Pro	Phe	Trp	Glu	Pro	Gly	Asn	Trp	Ser	His	Cys	Ser	Ala	Thr	Cys
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Gly	His	Leu	Gly	Ala	Arg	Ile	Gln	Arg	Pro	Gln	Cys	Val	Met	Ala	Asn
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				1460				1465					1470		
Ala	Gly	Phe	Glu	Pro	Cys	Asn	Ile	Arg	Asp	Cys	Pro	Ala	Arg	Trp	Phe
				1475				1480				1485			
Thr	Ser	Val	Trp	Ser	Gln	Cys	Ser	Val	Ser	Cys	Gly	Glu	Gly	Tyr	His
				1490			1495				1500				
Ser	Arg	Gln	Val	Thr	Cys	Lys	Arg	Thr	Lys	Ala	Asn	Gly	Thr	Val	Gln
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Val	Val	Ser	Pro	Arg	Ala	Cys	Ala	Pro	Lys	Asp	Arg	Pro	Leu	Gly	Arg
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Lys	Pro	Cys	Phe	Gly	His	Pro	Cys	Val	Gln	Trp	Glu	Pro	Gly	Asn	Arg

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Cys Pro Gly Arg Cys Met Gly Arg Ala Val Arg Met Gln Gln Arg His		
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Thr Ala Cys Gln His Asn Ser Ser Asp Ser Asn Cys Asp Asp Arg Lys		
1570	1575	1580
Arg Pro Thr Leu Arg Arg Asn Cys Thr Ser Gly Ala Cys Asp Val Cys		
1585	1590	1595
Trp His Thr Gly Pro Trp Lys Pro Cys Thr Ala Ala Cys Gly Arg Gly		
1605	1610	1615
Phe Gln Ser Arg Lys Val Asp Cys Ile His Thr Arg Ser Cys Lys Pro		
1620	1625	1630
Val Ala Lys Arg His Cys Val Gln Lys Lys Lys Pro Ile Ser Trp Arg		
1635	1640	1645
His Cys Leu Gly Pro Ser Cys Asp Arg Asp Cys Thr Asp Thr Thr His		
1650	1655	1660
Tyr Cys Met Phe Val Lys His Leu Asn Leu Cys Ser Leu Asp Arg Tyr		
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Lys Gln Arg Cys Cys Gln Ser Cys Gln Gly		1680
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 <213> homo sapiens

<400> 3

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 <212> PRT
 <213> homo sapiens

<400> 4

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			20					25					30		
Tyr	Phe	Leu	Pro	Glu	Phe	Ala	Leu	Ser	Pro	Gln	Gly	Ser	Phe	Leu	Glu
		35					40					45			
Asp	Thr	Thr	Gly	Glu	Gln	Phe	Leu	Thr	Tyr	Arg	Tyr	Asp	Asp	Gln	Thr

50	Ser Arg Asn Thr Arg	55	Ser Asp Glu Asp Lys	60	Gly Asn Trp Asp Ala
65	Trp Gly Asp Trp Ser	70	Asp Cys Ser Arg Thr	75	Cys Gly Gly Gly Ala Ser
	85		90		95
	Tyr Ser Leu Arg Arg		Cys Leu Thr Gly Arg		Asn Cys Glu Gly Gln Asn
	100		105		110
	Ile Arg Tyr Lys Thr		Cys Ser Asn His Asp		Cys Pro Pro Asp Ala Glu
	115		120		125
	Asp Phe Arg Ala Gln		Gln Cys Ser Ala Tyr		Asn Asp Val Gln Tyr Gln
	130		135		140
	Gly His Tyr Tyr Glu		Trp Leu Pro Arg Tyr		Asn Asp Pro Ala Ala Pro
	145		150		155
	Cys Ala Leu Lys Cys		His Ala Gln Gly Gln		Asn Leu Val Val Glu Leu
	165		170		175
	Ala Pro Lys Val Leu		Asp Gly Thr Arg Cys		Asn Thr Asp Ser Leu Asp
	180		185		190
	Met Cys Ile Ser Gly		Ile Cys Gln Ala Val		Gly Cys Asp Arg Gln Leu
	195		200		205
	Gly Ser Asn Ala Lys		Glu Asp Asn Cys Gly		Val Cys Ala Gly Asp Gly
	210		215		220
	Ser Thr Cys Arg Leu		Val Arg Gly Gln Ser		Lys Ser His Val Ser Pro
	225		230		235
	Glu Lys Arg Glu Glu		Asn Val Ile Ala Val		Pro Leu Gly Ser Arg Ser
	245		250		255
	Val Arg Ile Thr Val		Lys Gly Pro Ala His		Leu Phe Ile Glu Ser Lys
	260		265		270
	Thr Leu Gln Gly Ser		Lys Gly Glu His Ser		Phe Asn Ser Pro Gly Val
	275		280		285
	Phe Val Val Glu Asn		Thr Thr Val Glu Phe		Gln Arg Gly Ser Glu Arg
	290		295		300
	Gln Thr Phe Lys Ile		Pro Gly Pro Leu Met		Ala Asp Phe Ile Phe Lys
	305		310		315
	Thr Arg Tyr Thr Ala		Ala Lys Asp Ser Val		Val Gln Phe Phe Phe Tyr
	325		330		335
	Gln Pro Ile Ser His		Gln Trp Arg Gln Thr		Asp Phe Phe Pro Cys Thr
	340		345		350
	Val Thr Cys Gly Gly		Gly Tyr Gln Leu Asn		Ser Ala Glu Cys Val Asp
	355		360		365
	Ile Arg Leu Lys Arg		Val Val Pro Asp His		Tyr Cys His Tyr Tyr Pro
	370		375		380
	Glu Asn Val Lys Pro		Lys Pro Lys Leu Lys		Glu Cys Ser Met Asp Pro
	385		390		395
	Cys Pro Ser Ser Asp		Gly Phe Lys Glu Ile		Met Pro Tyr Asp His Phe
	405		410		415
	Gln Pro Leu Pro Arg		Ala Gly Asn Ile Ile		Leu Gly Leu His Val Pro
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<212> DNA

<213> homo sapiens

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aattgatectg	ctgccccctg	tgcactccaa	tgctcctgac	aaggacaaaa	cttgggtgggtg	300
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			20					25					30		
Asn	Cys	Glu	Gly	Gln	Asn	Ile	Arg	Tyr	Lys	Thr	Cys	Ser	Asn	His	Asp
	35					40					45				
Cys	Pro	Pro	Asp	Ala	Glu	Asp	Phe	Arg	Ala	Gln	Gln	Cys	Ser	Ala	Tyr
	50					55					60				
Asn	Asp	Val	Gln	Tyr	Gln	Gly	His	Tyr	Tyr	Glu	Trp	Leu	Pro	Arg	Tyr
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Asn	Asp	Pro	Ala	Ala	Pro	Cys	Ala	Leu	Lys	Cys	His	Ala	Gln	Gly	Gln
			85					90					95		
Asn	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp	Gly	Thr	Arg	Cys
	100							105					110		
Asn	Thr	Asp	Ser	Leu	Asp	Met	Cys	Ile	Ser	Gly	Ile	Cys	Gln	Ala	Val
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Gly	Cys	Asp	Arg	Gln	Leu	Gly	Ser	Asn	Ala	Lys	Glu	Asp	Asn	Cys	Gly
	130					135					140				
Val	Cys	Ala	Gly	Asp	Gly	Ser	Thr	Cys	Arg	Leu	Val	Arg	Gly	Gln	Ser
145					150					155				160	
Lys	Ser	His	Val	Ser	Pro	Glu	Lys	Arg	Glu	Gln	Asn	Val	Ile	Ala	Val
			165					170					175		
Pro	Leu	Gly	Ser	Arg	Ser	Val	Arg	Ile	Thr	Val	Lys	Gly	Pro	Ala	His
	180							185					190		
Leu	Phe	Ile	Glu	Ser	Lys	Thr	Leu	Gln	Gly	Ser	Lys	Gly	Glu	His	Ser
	195						200					205			
Phe	Asn	Ser	Pro	Gly	Val	Phe	Val	Val	Glu	Asn	Thr	Thr	Val	Glu	Phe
	210					215					220				
Gln	Arg	Gly	Ser	Glu	Arg	Gln	Thr	Phe	Lys	Ile	Pro	Gly	Pro	Leu	Met
	225				230					235				240	
Ala	Asp	Phe	Ile	Phe	Lys	Thr	Arg	Tyr	Thr	Ala	Ala	Lys	Asp	Ser	Val
			245					250					255		
Val	Gln	Phe	Phe	Phe	Tyr	Gln	Pro	Ile	Ser	His	Gln	Trp	Arg	Gln	Thr
	260						265						270		
Asp	Phe	Phe	Pro	Cys	Thr	Val	Thr	Cys	Gly	Gly	Gly	Tyr	Gln	Leu	Asn
	275						280					285			
Ser	Ala	Glu	Cys	Val	Asp	Ile	Arg	Leu	Lys	Arg	Val	Val	Pro	Asp	His
	290					295					300				
Tyr	Cys	His	Tyr	Tyr	Pro	Glu	Asn	Val	Lys	Pro	Lys	Pro	Lys	Leu	Lys
	305				310					315				320	
Glu	Cys	Ser	Met	Asp	Pro	Cys	Pro	Ser	Ser	Asp	Gly	Phe	Lys	Glu	Ile
			325					330						335	
Met	Pro	Tyr	Asp	His	Phe	Gln	Pro	Leu	Pro	Arg	Ala	Gly	Asn	Ile	Ile
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 Ala Leu Cys Val
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 <213> homo sapiens

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 35 40 45
 Asp Thr Thr Gly Glu Gln Phe Leu Thr Tyr Arg Tyr Asp Asp Gln Thr
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Trp	Gly	Asp	Trp	Ser	Asp	Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser
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Tyr	Ser	Leu	Arg	Arg	Cys	Leu	Thr	Gly	Arg	Asn	Cys	Glu	Gly	Gln	Asn
			100					105					110		
Ile	Arg	Tyr	Lys	Thr	Cys	Ser	Asn	His	Asp	Cys	Pro	Pro	Asp	Ala	Glu
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Asp	Phe	Arg	Ala	Gln	Gln	Lys	Ser	Ala	Tyr	Asn	Asp	Val	Gln	Tyr	Gln
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Gly	His	Tyr	Tyr	Glu	Trp	Leu	Pro	Arg	Tyr	Asn	Asp	Pro	Ala	Ala	Pro
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Cys	Ala	Leu	Lys	Cys	His	Ala	Gln	Gly	Gln	Asn	Leu	Val	Val	Glu	Leu
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Ala	Pro	Lys	Val	Leu	Asp	Gly	Thr	Arg	Cys	Asn	Thr	Asp	Ser	Leu	Asp
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Met	Cys	Ile	Ser	Gly	Ile	Cys	Gln	Ala	Val	Gly	Cys	Asp	Arg	Gln	Leu
	195						200					205			
Gly	Ser	Asn	Ala	Lys	Glu	Asp	Asn	Cys	Gly	Val	Cys	Ala	Gly	Asp	Gly
	210					215					220				
Ser	Thr	Cys	Arg	Leu	Val	Arg	Gly	Gln	Ser	Lys	Ser	His	Val	Ser	Pro
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Glu	Lys	Arg	Glu	Glu	Asn	Val	Ile	Ala	Val	Pro	Leu	Gly	Ser	Arg	Ser
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Val	Arg	Ile	Thr	Val	Lys	Gly	Pro	Ala	His	Leu	Phe	Ile	Glu	Ser	Lys
	260						265						270		
Thr	Leu	Gln	Gly	Ser	Lys	Gly	Glu	His	Ser	Phe	Asn	Ser	Pro	Gly	Val
	275					280						285			
Phe	Val	Val	Glu	Asn	Thr	Thr	Val	Glu	Phe	Gln	Arg	Gly	Ser	Glu	Arg
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Gln	Thr	Phe	Lys	Ile	Pro	Gly	Pro	Leu	Met	Ala	Asp	Phe	Ile	Phe	Lys
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Thr	Arg	Tyr	Thr	Ala	Ala	Lys	Asp	Ser	Val	Val	Gln	Phe	Phe	Phe	Tyr
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Gln	Pro	Ile	Ser	His	Gln	Trp	Arg	Gln	Thr	Asp	Phe	Phe	Pro	Cys	Thr
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Cys	Pro	Ser	Ser	Asp	Gly	Phe	Lys	Glu	Ile	Met	Pro	Tyr	Asp	His	Phe
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Gln	Pro	Leu	Pro	Arg	Trp	Glu	His	Asn	Pro	Trp	Thr	Ala	Cys	Ser	Val
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	450					455					460				
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	465				470					475					480
Lys	Trp	Ile	Ala	Met	Glu	Trp	Ser	Gln	Cys	Thr	Val	Thr	Cys	Gly	Arg
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Gly	Leu	Arg	Tyr	Arg	Val	Val	Leu	Cys	Ile	Asn	His	Arg	Gly	Glu	His
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	515					520						525			
Val	Ile	Pro	Ile	Pro	Cys	Tyr	Lys	Pro	Lys	Glu	Lys	Ser	Pro	Val	Glu
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Ala	Lys	Leu	Pro	Trp	Leu	Lys	Gln	Ala	Gln	Glu	Leu	Glu	Glu	Thr	Arg
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Ile	Ala	Thr	Glu	Glu	Pro	Thr	Phe	Ile	Pro	Glu	Pro	Trp	Ser	Ala	Cys

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Val Leu Leu Thr Phe Thr Gln Thr Glu Thr Glu Leu Pro Glu Glu Glu					
	595		600		605
Cys Glu Gly Pro Lys Leu Pro Thr Glu Arg Pro Cys Leu Leu Glu Ala					
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Cys Asp Glu Ser Pro Ala Ser Arg Glu Leu Asp Ile Pro Leu Pro Glu					
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Asp Ser Glu Thr Thr Tyr Asp Trp Glu Tyr Ala Gly Phe Thr Pro Cys					
	645		650		655
Thr Ala Thr Cys Leu Gly Gly His Gln Glu Ala Ile Ala Val Cys Leu					
	660		665		670
His Ile Gln Thr Gln Gln Thr Val Asn Asp Ser Leu Cys Asp Met Val					
	675		680		685
His Arg Pro Pro Ala Met Ser Gln Ala Cys Asn Thr Glu Pro Cys Pro					
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<400> 9

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 <212> PRT
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<400> 10

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Asn	Cys	Glu	Gly	Gln	Asn	Ile	Arg	Tyr	Lys	Thr	Cys	Ser	Asn	His	Asp
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Cys	Pro	Pro	Asp	Ala	Glu	Asp	Phe	Arg	Ala	Gln	Gln	Cys	Ser	Ala	Tyr
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Asn	Asp	Val	Gln	Tyr	Gln	Gly	His	Tyr	Tyr	Glu	Trp	Leu	Pro	Arg	Tyr
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Asn	Asp	Pro	Ala	Ala	Pro	Cys	Ala	Leu	Lys	Cys	His	Ala	Gln	Gly	Gln
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Asn	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp	Gly	Thr	Arg	Cys
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Asn	Thr	Asp	Ser	Leu	Asp	Met	Cys	Ile	Ser	Gly	Ile	Cys	Gln	Ala	Val
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Gly	Cys	Asp	Arg	Gln	Leu	Gly	Ser	Asn	Ala	Lys	Glu	Asp	Asn	Cys	Gly
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Val	Cys	Ala	Gly	Asp	Gly	Ser	Thr	Cys	Arg	Leu	Val	Arg	Gly	Gln	Ser
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Lys	Ser	His	Val	Ser	Pro	Glu	Lys	Arg	Glu	Glu	Asn	Val	Ile	Ala	Val
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Pro	Leu	Gly	Ser	Arg	Ser	Val	Arg	Ile	Thr	Val	Lys	Gly	Pro	Ala	His
			180					185					190		
Leu	Phe	Ile	Glu	Ser	Lys	Thr	Leu	Gln	Gly	Ser	Lys	Gly	Glu	His	Ser
		195					200					205			
Phe	Asn	Ser	Pro	Gly	Val	Phe	Val	Val	Glu	Asn	Thr	Thr	Val	Glu	Phe
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Gln	Arg	Gly	Ser	Glu	Arg	Gln	Thr	Phe	Lys	Ile	Pro	Gly	Pro	Leu	Met
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Val	Gln	Phe	Phe	Phe	Tyr	Gln	Pro	Ile	Ser	His	Gln	Trp	Arg	Gln	Thr
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	275						280					285			
Ser	Ala	Glu	Cys	Val	Asp	Ile	Arg	Leu	Lys	Arg	Val	Val	Pro	Asp	His
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Tyr	Cys	His	Tyr	Tyr	Pro	Glu	Asn	Val	Lys	Pro	Lys	Pro	Lys	Leu	Lys
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Met	Pro	Tyr	Asp	His	Phe	Gln	Pro	Leu	Pro	Arg	Trp	Glu	His	Asn	Pro
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Trp	Thr	Ala	Cys	Ser	Val	Ser	Cys	Gly	Gly	Gly	Ile	Gln	Arg	Arg	Ser
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Phe	Val	Cys	Val	Glu	Glu	Ser	Met	His	Gly	Glu	Ile	Leu	Gln	Val	Glu
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			405						410					415	
Thr	Val	Thr	Cys	Gly	Arg	Gly	Leu	Arg	Tyr	Arg	Val	Val	Leu	Cys	Ile
		420						425					430		
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	450					455					460				

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Glu	Leu	Glu	Glu	Thr	Arg	Ile	Ala	Tar	Glu	Glu	Pro	Thr	Phe	Ile	Pro
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Glu	Pro	Trp	Ser	Ala	Cys	Ser	Thr	Tar	Cys	Gly	Pro	Gly	Val	Gln	Val
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Arg	Glu	Val	Lys	Cys	Arg	Val	Leu	Leu	Tar	Phe	Thr	Gln	Thr	Glu	Tar
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Pro	Cys	Leu	Leu	Glu	Ala	Cys	Asp	Glu	Ser	Pro	Ala	Ser	Arg	Glu	Leu
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Asp	Ile	Pro	Leu	Pro	Glu	Asp	Ser	Glu	Tar	Thr	Tyr	Asp	Trp	Glu	Tyr
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Ala	Gly	Phe	Thr	Pro	Cys	Thr	Ala	Tar	Cys	Leu	Gly	Gly	His	Gln	Glu
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		595					600					605			
Ser	Leu	Cys	Asp	Met	Val	His	Arg	Pro	Pro	Ala	Met	Ser	Gln	Ala	Cys
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Asn	Thr	Glu	Pro	Cys	Pro	Pro	Arg	Arg	Glu	Pro	Ala	Ala	Cys	Arg	Ser
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<400> 12

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			20					25					30		
Tyr	Phe	Leu	Pro	Glu	Phe	Ala	Leu	Ser	Pro	Gln	Gly	Ser	Phe	Leu	Glu
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Asp	Thr	Thr	Gly	Glu	Gln	Phe	Leu	Thr	Tyr	Arg	Tyr	Asp	Asp	Gln	Thr
	50					55					60				
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Trp	Gly	Asp	Trp	Ser	Asp	Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser
			85					90					95		
Tyr	Ser	Leu	Arg	Arg	Cys	Leu	Thr	Gly	Arg	Asn	Cys	Glu	Gly	Gln	Asn
		100					105						110		
Ile	Arg	Tyr	Lys	Thr	Cys	Ser	Asn	His	Asp	Cys	Pro	Pro	Asp	Ala	Glu
	115						120					125			
Asp	Phe	Arg	Ala	Gln	Gln	Cys	Ser	Ala	Tyr	Asn	Asp	Val	Gln	Tyr	Gln
	130					135					140				
Gly	His	Tyr	Tyr	Glu	Trp	Leu	Pro	Arg	Tyr	Asn	Asp	Pro	Ala	Ala	Pro
	145				150					155					160
Cys	Ala	Leu	Lys	Cys	His	Ala	Gln	Gly	Gln	Asn	Leu	Val	Val	Glu	Leu
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Ala	Pro	Lys	Val	Leu	Asp	Gly	Thr	Arg	Cys	Asn	Thr	Asp	Ser	Leu	Asp
	180						185					190			
Met	Cys	Ile	Ser	Gly	Ile	Cys	Gln	Ala	Val	Gly	Cys	Asp	Arg	Gln	Leu
	195					200						205			
Gly	Ser	Asn	Ala	Lys	Glu	Asp	Asn	Cys	Gly	Val	Cys	Ala	Gly	Asp	Gly
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Ser	Thr	Cys	Arg	Leu	Val	Arg	Gly	Gln	Ser	Lys	Ser	His	Val	Ser	Pro
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Glu	Lys	Arg	Glu	Glu	Asn	Val	Ile	Ala	Val	Pro	Leu	Gly	Ser	Arg	Ser
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Val	Arg	Ile	Thr	Val	Lys	Gly	Pro	Ala	His	Leu	Phe	Ile	Glu	Ser	Lys
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Thr	Leu	Gln	Gly	Ser	Lys	Gly	Glu	His	Ser	Phe	Asn	Ser	Pro	Gly	Val
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Phe	Val	Val	Glu	Asn	Thr	Thr	Val	Glu	Phe	Gln	Arg	Gly	Ser	Glu	Arg
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Gln	Thr	Phe	Lys	Ile	Pro	Gly	Pro	Leu	Met	Ala	Asp	Phe	Ile	Phe	Lys
	305				310					315					320
Thr	Arg	Tyr	Thr	Ala	Ala	Lys	Asp	Ser	Val	Val	Gln	Phe	Phe	Phe	Tyr
		325						330					335		
Gln	Pro	Ile	Ser	His	Gln	Trp	Arg	Gln	Thr	Asp	Phe	Phe	Pro	Cys	Thr
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Val	Thr	Cys	Gly	Gly	Gly	Tyr	Gln	Leu	Asn	Ser	Ala	Glu	Cys	Val	Asp

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385	Cys	Pro	Ser	Ser	Asp	Gly	Phe	390	Lys	Glu	Ile	Met	Pro	395	Tyr	Asp	His	Phe
405	Gln	Pro	Leu	Pro	Arg	Trp	Glu	410	His	Asn	Pro	Trp	Thr	415	Ala	Cys	Ser	Val
420	Ser	Cys	Gly	Gly	Gly	Ile	Gln	425	Arg	Arg	Ser	Phe	Val	430	Cys	Val	Glu	Glu
435	Ser	Met	His	Gly	Glu	Ile	Leu	440	Gln	Val	Glu	Glu	Trp	445	Lys	Cys	Met	Tyr
450	Ala	Pro	Lys	Pro	Lys	Val	Met	455	Gln	Thr	Cys	Asn	Leu	460	Phe	Asp	Cys	Pro
465	Lys	Trp	Ile	Ala	Met	Glu	Trp	470	Ser	Gln	Cys	Thr	Val	475	Thr	Cys	Gly	Arg
480	Gly	Leu	Arg	Tyr	Arg	Val	Val	485	Leu	Cys	Ile	Asn	His	490	Arg	Gly	Glu	His
500	Val	Gly	Gly	Cys	Asn	Pro	Gln	505	Leu	Lys	Leu	His	Ile	510	Lys	Glu	Glu	Cys
515	Val	Ile	Pro	Ile	Pro	Cys	Tyr	520	Lys	Pro	Lys	Glu	Lys	525	Ser	Pro	Val	Glu
530	Ala	Lys	Leu	Pro	Trp	Leu	Lys	535	Gln	Ala	Gln	Glu	Leu	540	Glu	Glu	Thr	Arg
545	Ile	Ala	Thr	Glu	Glu	Pro	Thr	550	Phe	Ile	Pro	Glu	Pro	555	Trp	Ser	Ala	Cys
560	Ser	Thr	Thr	Cys	Gly	Pro	Gly	565	Val	Gln	Val	Arg	Glu	570	Val	Lys	Cys	Arg
575	Val	Leu	Leu	Thr	Phe	Thr	Gln	580	Thr	Glu	Thr	Glu	Leu	585	Pro	Glu	Glu	Glu
590	Cys	Glu	Gly	Pro	Lys	Leu	Pro	595	Thr	Glu	Arg	Pro	Cys	600	Leu	Leu	Glu	Ala
605	Cys	Asp	Glu	Ser	Pro	Ala	Ser	610	Arg	Glu	Leu	Asp	Ile	615	Pro	Leu	Pro	Glu
620	Asp	Ser	Glu	Thr	Thr	Tyr	Asp	625	Trp	Glu	Tyr	Ala	Gly	630	Phe	Thr	Pro	Cys
635	Thr	Ala	Thr	Cys	Leu	Gly	Gly	640	His	Gln	Glu	Ala	Ile	645	Ala	Val	Cys	Leu
645	His	Ile	Gln	Thr	Gln	Gln	Thr	650	Val	Asn	Asp	Ser	Leu	655	Cys	Asp	Met	Val
660	His	Arg	Pro	Pro	Ala	Met	Ser	665	Gln	Ala	Cys	Asn	Thr	670	Glu	Pro	Cys	Pro
675	Pro	Arg	Trp	His	Val	Gly	Ser	680	Trp	Gly	Pro	Cys	Ser	685	Ala	Thr	Cys	Gly
690	705	Val	Gly	Ile	Gln	Thr	Arg	710	Asp	Val	Tyr	Cys	Leu	715	His	Pro	Gly	Glu
720	Pro	Ala	Pro	Pro	Glu	Glu	Cys	725	Arg	Asp	Glu	Lys	Pro	730	His	Ala	Leu	Gln
735	Ala	Cys	Asn	Gln	Phe	Asp	Cys	740	Pro	Pro	Gly	Trp	His	745	Ile	Glu	Glu	Trp
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